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OBSERVATIONS UPON THE NOMENCLATURE OF SLUGS.

BY H. A. PILSBRY.

In preparing a faunal work the writer had occasion to mention the types of *Limax*, *Agriolimax* and *Arion*. The attempt disclosed various irregularities in the current use of these names.

Before incorporating radical changes into a formal work, it has seemed well to give the data here, in order that others interested may criticize the inferences drawn, and possibly suggest some mitigation of the unpleasant situation. While the facts bearing on the names discussed have been carefully collected, it is always possible that some name or publication has been overlooked.

I. *Limax* L. replaces *Arion* Fér.

LIMAX Linnæus, Syst. Nat. (10), I, p. 652, for *L. ater*, *rufus*, *maximus*, *agrestis*, *flavus*. Lamarck, Syst. An. s. Vert. 1801, p. 64. *L. rufus* mentioned as an example. Children, Lamarck's Genera of Shells, 1823, p. 99. "Type, *Limax rufus* [idem. Linn.]." Gray, P. Z. S. 1847, p. 170. Type, *L. rufus*.

ARION Férussac, Hist. Nat. Moll. 1819, p. 53, for *A. empiricorum* Fér. (including as varieties *ater* and *rufus* L., etc.), *A. albus* Müll., *A. fuscatus* Fér., *A. hortensis* Fér.

Férussac's action in dividing *Limax* L. was perfectly proper and a great advance. He created *Arion* for the first two Linnæan Limaces and others, and restricted *Limax* to Linnæus' last three species. Unfortunately he did not name types for either genus; so that his work was overturned by Children, in 1823, who selected Linnæus' second species (an *Arion*) as the type of *Limax*. This restriction of *Limax* to the Arions was confirmed by Gray in 1847, though as often happened, he did not know what he was doing.

So far as I know, the only modern author to substitute *Limax* for *Arion* was F. Jousseume, in the Bull. Zool. Soc., France, I, 1876, p. 26. He took this stand on account of the publication of *Limacella* for the *maximus* and *agrestis* groups by Brard.

II. *Eulimax* Moq.-Tand. replaces *Limax* Auct.

Limax being relegated to what we have called *Arion*, it remains to provide a name for what has hitherto passed as *Limax*. The group has been named several times, and the older names included both the large and small limaces. EULIMAX Moquin-Tandon, Hist. Nat. Moll. France II, 1855, pp. 18, 22, originally proposed to distinguish Limaces from Amalias, has subsequently been restricted to the *maximus* group. It may be used in a generic sense with *Limax maximus* L. as type.

III. *Limacella* substituted for *Agriolimax*.

In his useful Check-list of the Slugs¹ Professor Cockerell called attention to the nomenclature of the group generally known as *Agriolimax*. He found that there were several names

¹The Conchologist, II, 1893, p. 199.

earlier than *Agriolimax*, but as their authors did not mention truly generic characters, the name in common use was allowed to stand, though evidently with misgivings. It may be mentioned that Mörch also had little idea of the true generic characters of *Agriolimax*.

The names preceding *Agriolimax* are as follows:

LIMACELLA Brard, Hist. des Coquilles, env. Paris, 1815, p. 107, for *Limacella parma*, *unguiculus*, *obliqua*, *concava*. *Limacella obliqua* (= *Limax agrestis* L.) here selected as type. Not *Limacella* Blainville, 1817.

DEROCERAS Rafinesque, Annals of Nature, 1820, p. 10; Binney and Tryon's reprint, p. 65. For *Limax gracilis* Raf.¹

KRYNICKIA Kaleniczenko, Bull. Soc. Imp. Nat. Moscou, 1839, p. 30, for *K. melanocephala* Kalen. A nude name.

KRYNICKILLUS Kalen., Bull. Soc. Imp. Nat. Moscou, XXIV, 1851, p. 220, for *K. melanocephalus*,¹ *minutus*, *cristatus*, *maculatus*, *eichwaldii*, *dymezeviczii*, all new species.

The type of *Krynickia* and *Krynickillus* Kalen. and *Megaspis* Krynicki, is *K. melanocephalus* Kalen.

Krynickia melanocephala was published as a bare name in 1839, but cited as a synonym of *Krynickillus melanocephalus* in 1851, together with *Megaspis melanocephalus*. *Krynickillus* therefore takes precedence if any use is found for the name.

MALINO Gray, Catalogue of Pulmonata, Brit. Mus., Pt. I, 1855, p. 178, for *Limax lombricoides* Morelet.

MEGAPELTA Mörch, Journ. de Conchyl., 1857, p. 282, for *Limax (Megapelta) semitectus* Mörch. (Described from a draw-

¹"*Limax gracilis*. Body slender, head and lower tentacula fulvous, neck grey, upper tentacula brownish, mantle dark fulvous, back smooth brown, beneath dirty white; tail brown, obtuse above, mucronate and acute beneath.—Probably a real *Limax*, yet it has the two long tentacula inserted above the neck, while the small ones are terminal, and all slightly club shaped. It may perhaps form a sub-genus *Deroceras*. Length over one inch. Found near Hendersonville in Kentucky, and in woods."

There can be very little doubt that this is *Limax campestris* Binn.

¹ With the synonyms *Krynickia melanocephala* Kalen., 1839, and *Megaspis melanocephala* Krynicki, unpublished.

See *Agriolimax melanocephalus* Simroth, Die Nachtschnecken fauna des Russischen Reiches, 1901, p. 154.

ing. Thought by von Martens to be probably not distinct from *Limax lævis*, in the wide sense.)

AGRIOLIMAX Mörch, Journ. de Conchyl., 1865, p. 378. *L. agrestis* here selected as type.

Since 1865 several additional names have been proposed, some of which have been used for subdivisions, such as *Hydrolimax* Malm., for the *lævis* group. Of the names given above, it will probably be best to revive LIMACELLA Brard, with the type *L. obliqua* = *L. agrestis*. Brard's name has been discredited because he founded a genus upon the *shell* as distinct from the animal; but after all, he was only following the example of Linné, who based his genera of testacea wholly upon the shells, prefacing the conchological definition with "animal a Limax." Brard's nomenclature was indisputably regular, being on absolutely Linnean lines. He left *Limax* for the slugs without a shell (*L. rufus* Linn.).

Jousseume in 1876 (Bull. Soc. Zool. de France I, p. 25), followed by Mabille in the same publication (p. 96), used *Limacella* for the *L. maximus*, *flavus* and *agrestis* groups, without selecting a type.

Limacella of Blainville, 1817, was incorrectly defined, but Prof. Cockerell has shown that its type is a *Philomycus*. Being later than Brard's *Limacella*, this use of the name is not admissible under the existing rules of nomenclature.

TETHYS WILLCOXI IN NEW ENGLAND WATERS.

BY S. N. F. SANFORD.

On Oct. 9, 1921, a number of those curious tectibranch mollusks known as Sea Hares, *Tethys* (*Aplysia*) *willcoxi* (Heilprin), appeared in the West Passage of Narragansett Bay, R. I., coming in on the flood of the tide and disappearing with its ebb. As the tide was going out only two specimens were secured by the writer and his companion, Mr. Orville C. Minkler, although several others had been seen during the day. A second trip to the same station, on Oct. 16, yielded two more specimens, but